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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,480	11/05/2003	Woo Tae Jeong	967.43261X00	7747

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EXAMINER

STINSON, FRANKIE L

ART UNIT PAPER NUMBER

1746

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/700,480

Applicant(s)

JEONG ET AL.

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “triangular pattern” as claimed in claim 1, line 2, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1, lines 1-2, the phrase "the annulus" is without proper antecedent basis. This is also applicable to the phrase "the sweeping motion" at line 5; "the direction" at line 6; "the hand hold" at line 11; "the outer side" at line 12; "the front" and "the rear" (assumed to be - -rear- -); "the transportation" at line 15. In claim 2, line 5, "the repulsive forces" is also without proper antecedent basis.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan'998 (Japan 9-296998) in view of Japan'192 (Japan'289192).

Re claim 1, Japan'998 is cited disclosing an automated lance system which can perform lancing along a steam generator with a tube array of a pattern and which comprises, in combination, a lance body (4b) which comprises a nozzle block (8), which comprises a circular nozzle cylinder and a first drive means to make the sweeping motion of said circular nozzle cylinder (vertical drive means), and a second drive means (nozzle oscillating means) to adjust the direction of nozzle jets from said circular nozzle cylinder by rotating said nozzle block in the horizontal plane, a rigid guide support rail (9a, 9b) which comprises two parallel circular rods which extend along said steam generator and whose ends are tightly fastened inside the said steam generator, and two side support wheels attached to an outer side of said lance body, and control cables attached to both **the front and the rear plates** of said lance body, said articulated body being driven by

a drive means, resulting in the transportation of said lance body along said rigid guide support rail that differs from the claim only in the recitation of the cleaning of the annulus and the cables being connected at the front and rear. Japan'192 discloses the cleaning of the annulus and the two cables (see fig. 2). It therefore would have been obvious to one having ordinary skill in the art to modify the device of Japan'998, to clean the annulus as taught by Japan'192, for the purpose of ensuring the cleaning the entice steam generator. As for the location of the cables, to have the same located at end plates is deemed to be a mere rearrangements of parts. Re claim 2, no patentable distinction is deemed to exist between the rail as claimed and the rails as taught by Japan'998, since this is considered to be a mere substitution of equivalents. Re claim 3, since Japan'192 discloses the positioned of the rails as instantly claimed, the flexibility as claimed is deemed to be inherent. This also applicable to the subject matter of claim 5. Re claim 4, Japan'192 discloses the tow cables (see fig. 2, as at at 3 and 8).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In France'490, Robinson et al., Haug, Mulder, Magin et al., Thome, Faure et al., Lesham, Figlhuber et al., Kastl et al., Beyer, Hulbert, Jr., Hine, SU'390, France'325, Japan'475, note the cleaning means .

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls



FRANKIE L. STINSON  
Primary Examiner  
GROUP ART UNIT 1746